Amendments to the Claims

The listing of claims below is intended to replace all prior listings of the claims:

1. (Currently amended) A method of manufacture of a soluble, microbiologically active and stable acrolein polymer comprising the following steps in sequence: (a) polymerising acrolein in the presence of base to form a polymer of acrolein; (b) dissolving the polymer of acrolein in an alcohol selected from monoalcohols and polyols optionally with addition of water to form an alcohol solution of the polymer of acrolein and providing a pH of no more than 7; (c) heating the alcohol solution of the polymer of acrolein of pH of no more than 7 to ~~form~~ react the polymer of acrolein with the alcohol; and (d) mixing base with the polymer of acrolein.

2. (Currently amended) A method according to claim 1 wherein the acrolein polymer comprises a co-monomer in an amount of up to 10% by weight of the total monomer composition.

3. (Original) A method according to claim 1 wherein the acrolein polymer is a homopolymer.

4. (Currently amended) A method according to claim 1 wherein the ~~polymer of~~ acrolein polymer is collected from the polymerisation reaction as a precipitate and dissolved in the alcohol.

5. (Original) A method according to claim 1 wherein the acrolein polymer is not subject to oxidation by heating of the acrolein polymer solid in air at a temperature of at least 60°C before dissolving in the alcohol.

6. (Original) A method according to claim 1 wherein the acrolein polymer is isolated as a solid from the step of polymerisation in the presence of base and dissolved in the alcohol without a step of oxidising the isolated solid by heating in air.

7. (Original) A method according to claim 1 wherein the acrolein polymer is dissolved in the alcohol by heating the acrolein polymer in the alcohol to a temperature in the range of from 40 to 105°C.

8. (Original) A method according to claim 1 wherein alcohol is a polyalkylene glycol.

9. (Currently amended) A method according to claim 1 wherein the heating of the acrolein polymer ~~of acrolein~~ in alcohol is continued for a time sufficient so that it does not precipitate when subject to ~~the herein defined aqueous solution stability test~~ an Aqueous Solution Stability Test.

10. (Original) A method according to claim 1 wherein the acrolein polymer is heated in the alcohol at a temperature in the range from 50 to 105°C, for a period in the range of from fifteen minutes to five hours.

11. (Original) A method according to claim 1 wherein the acrolein polymer dissolved in the alcohol in step (b) has an acid content of less than 1 mole of carboxyl groups per kilogram of polymer.

12. (Original) A method according to claim 11 wherein said acid content is less than 0.5 mole acid groups per kilogram of polymer.

13. (Original) A method according to claim 1 wherein the base is added to the alcohol solution following formation of alcohol.

14. (Original) A method according to claim 13 wherein the pH of the resulting solution is in the range of from 7 to 9.5.

15. (Original) A method according to claim 13 wherein the pH of the resulting solution is in the range of from 7.5 to 8.5.

16. (Original) A method according to claim 1 wherein the base comprises a compound selected from the group consisting of alkali metal carbonate alkali metal hydroxide such as sodium hydroxide and mixtures thereof.

17. (Original) A method according to claim 16 wherein the base comprises sodium carbonate and/or potassium carbonate.

18. (Currently amended) A method according to claim 1 wherein the acrolein polymer ~~of acrolein~~ used in the step of heating in the alcohol is in a concentration in the alcohol of from 0.5 to 50% by weight.

19. (Original) A method according to claim 18 wherein the concentration is from 0.5 to 40% by weight.

20. (Currently amended) A method according to claim 1 wherein the alcohol is polyethylene glycol and ~~in~~ is present at a concentration in the range of from 5 to 90% by weight.

21. (Original) A method according to claim 1 wherein the alcohol is a polyethylene glycol of molecular weight in the range of from 200 to 20,000.

22. (Currently amended) A composition prepared according to the method of claim 1 ~~any one of claims 1 to 21~~.

23. (Currently amended) Use of the acrolein polymer prepared according to claim 1 ~~any one of claims 1 to 15~~ as an antimicrobial.

24. (Currently amended) A use according to claim 23 wherein the acrolein polymer provides a minimum kill concentration after storage at 40°C for no less than twenty days of less than 150 ppm against E. coli, at 104-109 ~~efu/mL,~~ cfu/mL.

25. (Original) A use according to claim 23 in administration to animals for treatment or prophylaxis of gastrointestinal microbiological infection.

26. (Original) Use of an acrolein polymer prepared according to claim 1 in preparation of a medicament for oral administration to animals in treatment or prevention of gastrointestinal infection.

27. (Original) A use according to claim 26 wherein the composition is in a form for administered to animals via drinking water or via food.